

L Number	Hits	Search Text	DB	Time stamp
1	1	5699501.pn. and (link\$3 path\$5 session\$5 channel\$6 line\$5)	USPAT	2003/04/03 10:11
10	0	(join\$6 with member\$5 with group\$5 with register\$6) and (709/\$ 707/\$).ccls.	USPAT	2003/04/03 10:57
11	40	((join\$6 member\$5) with group\$5 with register\$6) and (709/\$ 707/\$).ccls.	USPAT	2003/04/03 11:14
13	10318	(member\$5 with inform\$9 register\$6) and (709/\$ 707/\$).ccls.	USPAT	2003/04/03 11:20
14	46	(member\$5 with inform\$9 with register\$6) and (709/\$ 707/\$).ccls.	USPAT	2003/04/03 11:21
-	2	(("5920701") or ("5699501")).PN.	USPAT	2003/04/02 11:18
-	1	("5699501").PN.	USPAT	2003/04/02 13:32
-	4	5699501.uref.	USPAT	2003/04/02 10:41
-	1	5699501.pn. and ((select\$5 vot\$6 elect\$6) with leader\$6)	USPAT	2003/04/02 11:44
-	1	5699501.pn. and (priorit\$6)	USPAT	2003/04/02 11:44
-	1351	(select\$5 vot\$6 elect\$6) with group\$5 with (master\$6 leader\$6)	USPAT	2003/04/02 11:48
-	138	((select\$5 vot\$6 elect\$6) with group\$5 with (master\$6 leader\$6)) and (709/\$ 370/\$).ccls.	USPAT	2003/04/02 11:56
-	174	((select\$5 vot\$6 elect\$6) with group\$5 with (master\$6 leader\$6)) and (709/\$ 714/\$ 370/\$).ccls.	USPAT	2003/04/02 11:49
-	59	((select\$5 vot\$6 elect\$6) with group\$5 with (master\$6 leader\$6)) and (709/\$ 714/\$ 370/\$).ccls. and priority	USPAT	2003/04/02 11:50
-	1	((select\$5 vot\$6 elect\$6) with group\$5 with (master\$6 leader\$6)) and 5944778.pn.	USPAT	2003/04/02 11:56
-	1	(select\$6 vot\$6 elect\$6) and master\$5 and 5944778.pn.	USPAT	2003/04/02 11:57
-	0	(vot\$5 near priority) with (leader\$5 master\$6)	USPAT	2003/04/02 13:33
-	3	(vot\$5 near priority)	USPAT	2003/04/02 13:43
-	7	(("5898686") or ("5355371") or ("5541927") or ("5553083") or ("5675802") or ("5727002") or ("6006254")).PN.	USPAT	2003/04/02 14:03
-	0	(ip with multicast\$6) with (select\$5 elect\$6 poll\$5 vot\$6) with (master\$5 leader\$6)	USPAT	2003/04/02 14:05
-	1	("5938732").PN.	USPAT	2003/04/02 17:07
-	2	("5938732").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/04/02 14:22
-	0	(("5938732").PN.) and (priorit\$6)	USPAT	2003/04/02 14:08
-	1	(("5938732").PN.) and (priorit\$6 leader\$5)	USPAT	2003/04/02 14:09
-	1	(("5938732").PN.) and ((select\$6 elect\$6 vot\$6 poll\$5) same leader\$5)	USPAT	2003/04/02 14:23
-	16	5938732.uref.	USPAT	2003/04/02 14:11
-	6	5938732.uref. and (leader\$5 master\$6)	USPAT	2003/04/02 14:19
-	8	5938732.uref. and (leader\$5 rank\$6 priorit\$6 master\$6)	USPAT	2003/04/02 14:20
-	17	lim near swee near boon	USPAT	2003/04/02 14:22
-	1	(lim near swee near boon) and ((select\$6 elect\$6 vot\$6 poll\$5) same (master\$5 leader\$5))	USPAT	2003/04/02 14:29
-	1	5699501.pn. and (server\$5)	USPAT	2003/04/02 15:25
-	1199	frame\$3 near9 server\$5	USPAT	2003/04/02 14:56
-	77	(processing adj node\$5) with server\$5	USPAT	2003/04/02 14:56
-	1	5699501.pn. and (node\$6 same service\$5)	USPAT	2003/04/02 14:57
-	1	5699501.pn. and (server\$5 with (processing near node\$5))	USPAT	2003/04/02 15:34
-	8219	server\$5 with (service\$5 and network\$5)	USPAT	2003/04/02 15:50
-	7866	priorit\$7 with (improv\$5 allow\$5 fast\$5)	USPAT	2003/04/02 16:36
-	876	(priorit\$7 with (improv\$5 allow\$5 fast\$5)) and 709/\$.ccls.	USPAT	2003/04/02 16:30
-	106	priorit\$7 with (allow\$5) with process\$6 with high	USPAT	2003/04/02 16:38

-		24	(priorit\$7 with (allow\$5) with process\$6 with high) and 709/\$.ccls.	USPAT	2003/04/02 16:41
-		9	(priorit\$7 with (allow\$5) with process\$6 with high) and (reduc\$6 with load\$6)	USPAT	2003/04/02 16:43
-		1	priority with (reduc\$6 with load\$6 with balance\$5)	USPAT	2003/04/02 16:50
-		1	5699501.pn. and (inactiv\$6 leav\$6)	USPAT	2003/04/02 16:50
-		1	5699501.pn. and (inactiv\$6 period\$6 beat\$6 time\$5 heartbeat\$6 leav\$6)	USPAT	2003/04/02 17:29
-		1	(("5938732").PN.) and (heartbeat\$6 beat\$5 period\$5)	USPAT	2003/04/02 17:11
-		1	5938732.pn. and server\$5	USPAT	2003/04/02 17:23
-		0	5938732.pn. and (server\$5 with leader\$6)	USPAT	2003/04/02 17:12
-		0	5938732.pn. and (priorit\$6)	USPAT	2003/04/02 17:13
-		1	5938732.pn. and ((heartbeat\$5 (control near message\$5)) same leader\$5)	USPAT	2003/04/02 17:14
-		1	5938732.pn. and heartbeat\$5	USPAT	2003/04/02 17:23
-		0	5699501.pn. and (ip)	USPAT	2003/04/02 17:32
-		91	(heartbeat\$5) with (reliab\$6)	USPAT	2003/04/02 17:36
-		1	((heartbeat\$5) with (reliab\$6)) and 709/\$.ccls.	USPAT	2003/04/02 17:33
-		4	(heartbeat\$5) with period\$6 with monitor\$6 with fail\$6	USPAT	2003/04/02 18:14
-		0	("5938732" "5699501").pn. and (register\$6)	USPAT	2003/04/02 18:14
-		3146	join\$6 with register\$6	USPAT	2003/04/02 18:17
-		106	(join\$6 with register\$6) and 709/\$.ccls.	USPAT	2003/04/03 10:51

Leader Election

Leader election is a fundamental problem in the area of distributed computing. We have designed protocols for this problem by combining techniques from several existing protocols in a modular fashion. Each of these protocols is structured as a sequence of phases. The phases were designe independently and then composed using sequential composition. There are several problems in distributed computing that have been shown to be equivalent to leader election in terms of complexity. Our solutions lead to improvements in the complexity of these problems as well.

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